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Plot file name      : pierre00.cgm            Jobname : Valkyrie
Full user name      : bpau
Account number      : OPENWORKS
User location       : -
Banner text         :
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STATOIL

Petoro AS, Norsk Hydro ASA, ENI Norge AS

PARTNERS

STATOIL

WELL **6608/11-5**

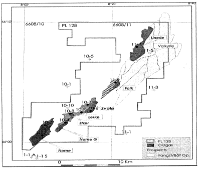
COMPOSITE LOG
1 : 500

PROSPECT STRUCTURE

Valkyrie 1

AREA:	Norwegian Sea
LICENCE:	PL 128
COORDINATES:	66° 11' 09.5"N 08° 28' 50.4"E
RT:	22.0 m MSL
WATER DEPTH:	342.5 m MD
TOTAL DEPTH:	2270 m MD
FM. AT T.D.:	Red Beds
SPUD DATE:	18.06.2006
RIG RELEASE:	16.07.2006
WELL STATUS:	P&A
RIG:	Ocean Vanguard
CONTRACTOR:	Diamond Drilling
GEOLOGIST :	A. E. Lea, J. T. Samlanes, B. E. Paulsen, L. C. Nilssen, A. Neitzel
PREPARED BY:	Bjørn Egil Paulsen

LOCATION MAP



CASING DATA

30"	410.0 m MD
9 5/8"	1299.0 m MD

LEAK OFF TESTS

XLOT 1.57 sg

VELOCITY SURVEY: Schlumberger

Run 1A inside 9 5/8" liner
zero offset VSP
1890m - 423m.

LOG RUNS

CONTRACTOR: Schlumberger / BHI (MWD)

MWD **MPR-lite - acoustic** **Run 1, 412 - 1305m**	**MWD** **MPR/ARC (Periscope)** **Run 2, 1305 - 1559m** **Run 3, 1574 - 1900m** **Run 4, 1900 - 2270m** **Run 4 included the ARC (PERISCOPE) tool from Schlumberger**	**WIRELINE RUNS** **Run 1A, VSP-GR** **Run 1A, PEX-HRLA** **Run 1A, MDT (pressure)** **Run 1A, DSI-FMI** **Run 1B, MDT-GR** **Run 1C, MDT-GR**	**1890 - 423m** **1890 - 1300m** **1553 - 1734m** **1885 - 1290m** **1553.8m** **1551 - 1589m**		**Change to Sclumberger MWD from 1900-2270 mMD**	

COMMENTS:

One core was cut in the Båt Group, Åre 1 Formation.

The well was permanently plugged and abandoned.

LITHOLOGICAL SYMBOLS

CONGLOMERATE

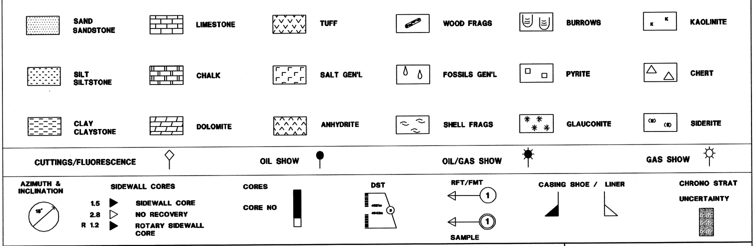
SHALE

MARL

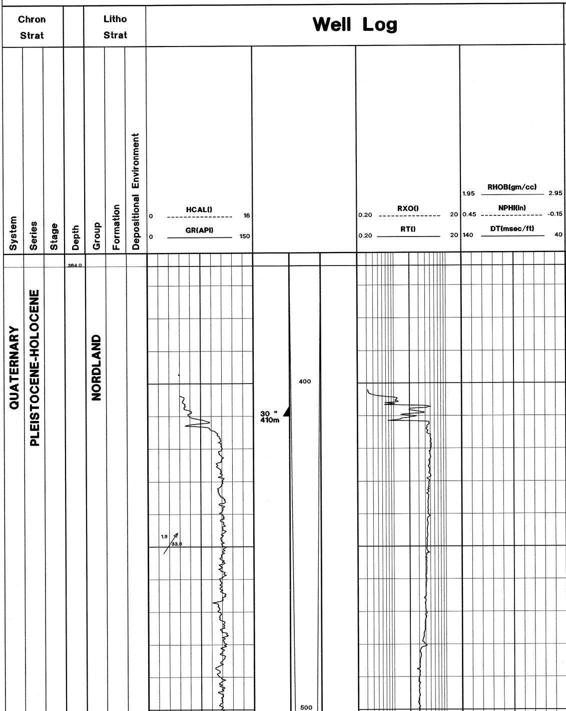
C C C C
or
COAL
LIGNITE

FORAMS

M M
MICA



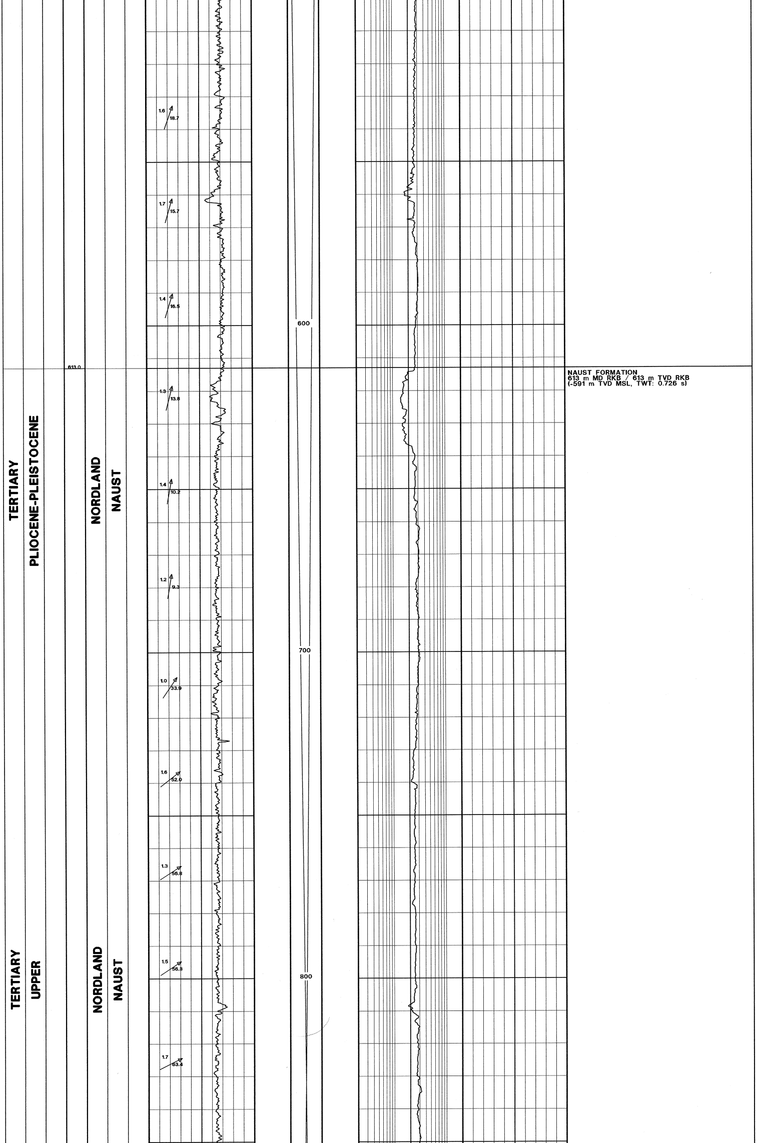
Well Log



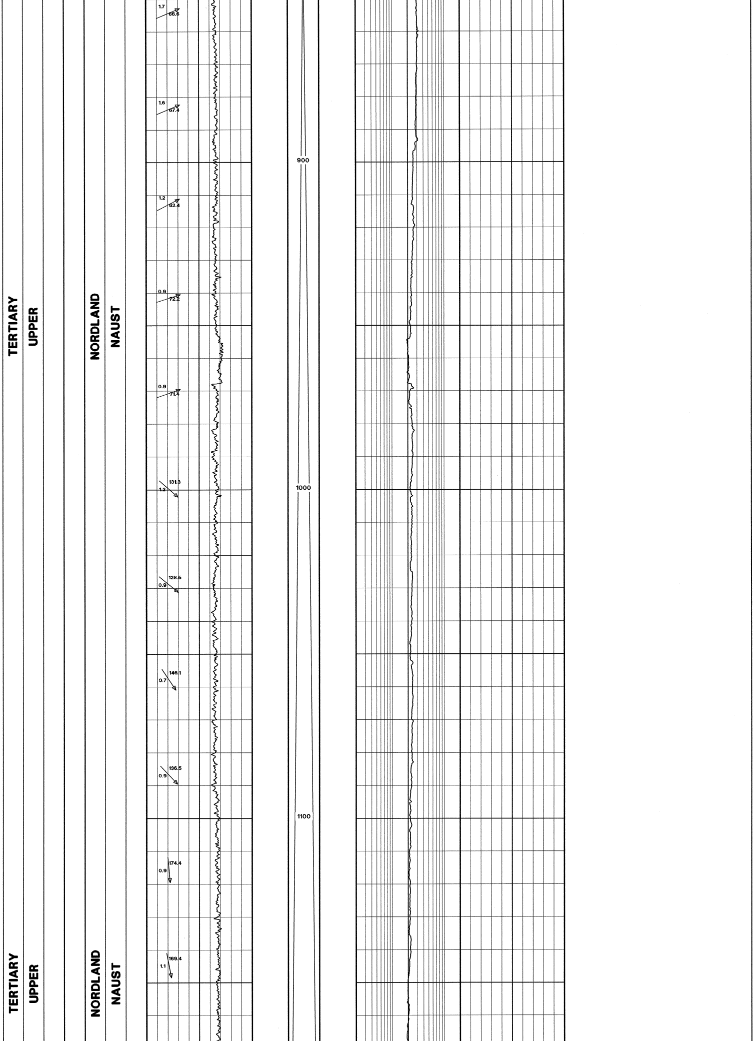
Lithological Descriptions

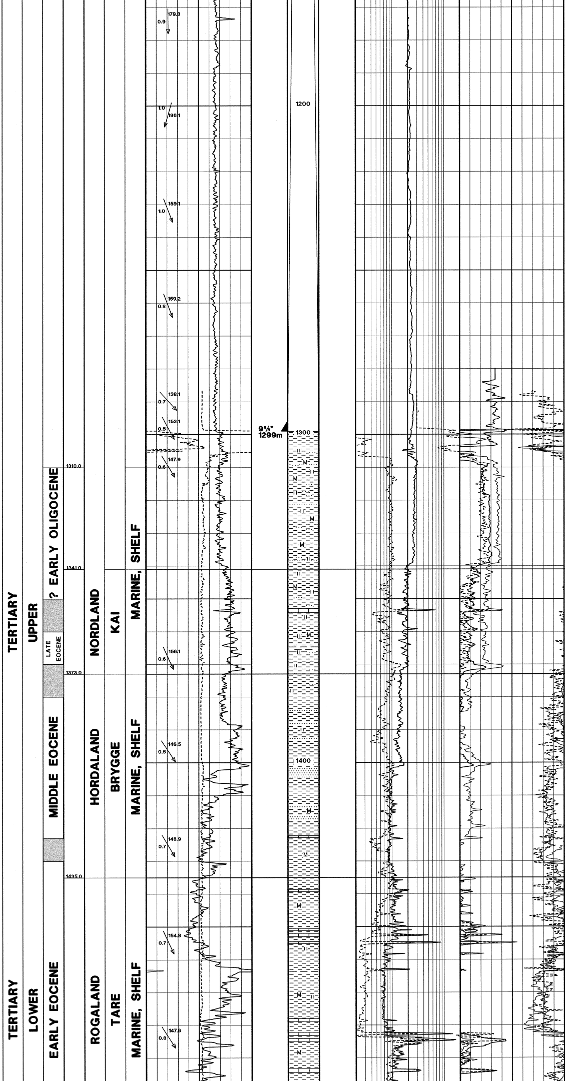
SEABED
364 m MD RKB / 364 m TVD RKB
(-342 m TVD MSL, TWT: 0.456 s)

RETURNS TO SEABED



NAUST FORMATION
613 m MD RKB / 613 m TVD RKB
(-591 m TVD MSL, TWT: 0.726 s)





CLAYSTONE: Medium dark grey to dark grey, olive grey to olive black, firm to hard, predominantly moderate hard, blocky to sub blocky, very silty grading siltstone/sandstone in part, slightly calcareous, micromicaceous

SANDSTONE: Clear to translucent quartz grains, very fine to medium, occasionally coarse to very coarse, poorly sorted, loose quartz grains, subangualar to subrounded

KAI FORMATION
1341 m MD RKB / 1341 m TVD RKB
(-1319 m TVD MSL, TWT: 1.314 s)

CLAYSTONE: Medium grey to medium dark grey, olive grey, soft to very soft, sticky, silty to very silty, sandy in part, calcareous to very calcareous, micromicaceous

LIMESTONE: White to yellowish brown, moderately hard to hard, microcrystalline

SANDSTONE: Loose translucent quartz grains, fine to very coarse, poorly sorted, subangular to subrounded

HORDALAND GROUP
BRYGGE FORMATION
1373 m MD RKB / 1373 m TVD RKB
(-1351 m TVD MSL, TWT: 1.346 s)

CLAYSTONE: Medium dark grey to medium grey, olive grey, soft to firm, occasionally sticky, silty, sub blocky, non calcareous

SANDSTONE: Transluscent, loose quartz grains, very fine to medium, occasionally coarse, subangular

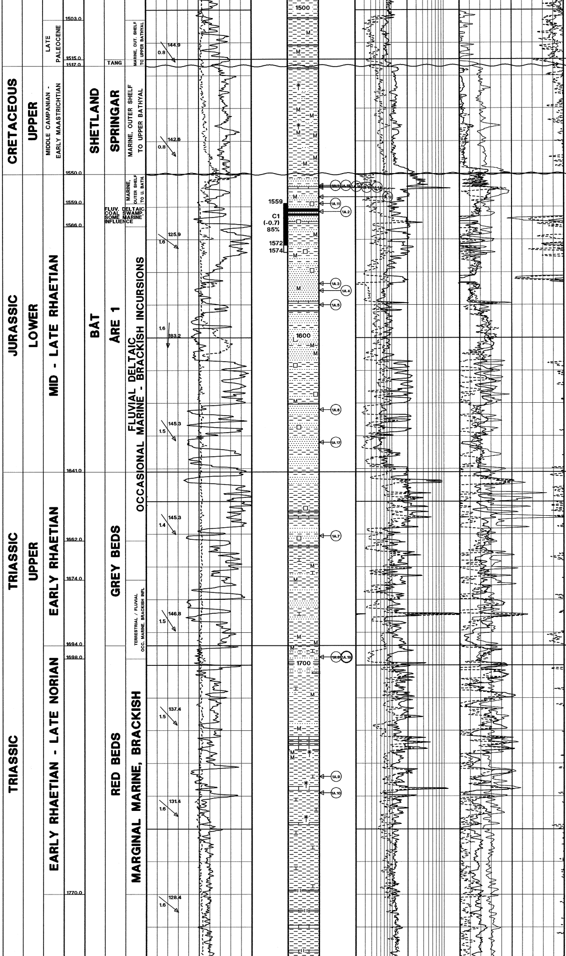
CLAYSTONE: Medium light grey to medium dark grey, light bluish green in place, soft to firm, occasionally sticky, non calcareous

TARE FORMATION
1435 m MD RKB / 1435 m TVD RKB
(-1413 m TVD MSL, TWT: 1.415 s)

CLAYSTONE: Medium grey to medium bluish grey, olive grey, firm, flaky, subblocky to blocky, mica in place, slightly silty, non calc

LIMESTONE (traces): Very light grey to offwhite to medium brown, blocky, firm to hard, argillaceous

LIMESTONE (traces): Off white to light grey, firm to hard, subblocky to blocky, argillaceous



CLAYSTONE: Medium grey to greenish grey, occasionally medium dark grey to dark grey, medium light grey, dominantly non calcareous, firm to occasionally moderately hard, blocky, micromica

TANG FM, 1515 m MD RKB / 1515 m TVD RKB
(-1493 m TVD MSL, TWT: 1.479 s)

SHETLAND GROUP
SPRINGAR FORMATION
1517 m MD RKB / 1517 m TVD RKB
(-1495 m TVD MSL, TWT: 1.482 s)

CLAYSTONE: Medium dark grey to dark grey, greenish grey to dark greenish grey, soft to firm, blocky in part, silty in part, non calcareous, glauconitic in part, micromica, trace of pyrite

BÅT GROUP
ÅRE FORMATION
1550 m MD RKB / 1550 m TVD RKB
(-1528 m TVD MSL, TWT: 1.576 s)

SANDSTONE: Clear to transluscent loose quartz grains, very fine to medium, occasionally coarse to very coarse, moderately to poorly sorted, subangular to angular, non calcareous

CLAYSTONE: Medium dark grey to dark grey, soft to firm, occasionally hard, blocky to subblocky, silty, carbonaceous in part, non calcareous, micromica

LIMESTONE (traces): Light brown to light grey, argillaceous, blocky, moderately hard, crystalline

SANDSTONE: Clear to translucent loose quartz grains, very fine to coarse, occasionally very coarse, very poorly sorted, subangular to subrounded

SANDSTONE: Clear to translucent loose quartz grains, medium to coarse, occasionally very coarse, moderately to poorly sorted, angular to subangular, pyrite in place

CLAYSTONE: Greenish grey to olive grey, soft to firm, sticky in part, subblocky in part, non calcareous, micromica, silty in part, micropyrite

SANDSTONE: Clear to translucent loose quartz grains, opaque to clear in part, fine to medium, occasionally coarse, moderately sorted, sub angular, pyrite

GREY BEDS
1641 m MD RKB / 1641 m TVD RKB
(-1619 m TVD MSL, TWT: 1.623 s)

SANDSTONE: Clear to translucent loose quartz grains, predominantly fine to medium, occasionally medium to coarse, moderately to poorly sorted, silica cemented in part, subangular to subrounded, pyrite

CLAYSTONE: Medium grey to medium dark grey, predominantly soft, sticky, non calcareous, micromica

LIMESTONE: White to yellowish white, soft to firm, microcrystalline

RED BEDS
1694 m MD RKB / 1694 m TVD RKB
(-1672 m TVD MSL, TWT: 1.668 s)

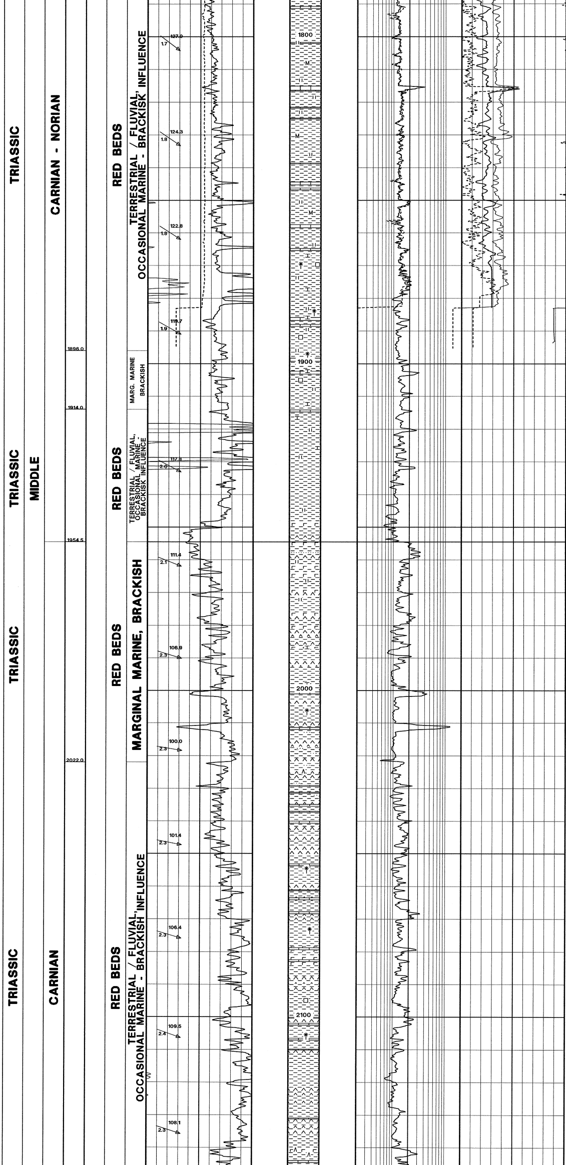
CLAYSTONE: Dark grey to greyish black, medium grey to medium dark grey, soft to firm, silty in part, calcareous, micromica

LIMESTONE: White to yellowish white, yellowish brown in part, soft to firm, microcrystalline

CLAYSTONE: Varicolored, soft to firm, calcareous to very calcareous, glauconitic in part, micromica

LIMESTONE: White to yellowish white, yellowish brown in part, soft to firm, laminations, microcrystalline

CLAYSTONE: Varicolored, soft to firm, predominantly soft, sticky in part, blocky in part, very calcareous, grading marl in part, slightly silty



LIMESTONE (traces): White to brownish white, soft to firm, argillaceous, microcrystalline

CLAYSTONE: Varicolored, subblocky, partly calcareous, silty

LIMESTONE: Medium light grey to light grey, occasionally medium light brown, subblocky, soft to moderate hard

CLAYSTONE: Medium light grey to light grey, sub rounded to subblocky, soft to firm, glauconitic, calcareous, partly silty

CLAYSTONE: Medium light grey to light grey, medium yellowish brown, blocky to subblocky, soft to firm, glauconittic, calcareous, silty in part

CLAYSTONE: Varicolored, soft to moderate hard, subblocky to blocky, very calcareous, partly silty, traces of pyrite and kaolinite

HALITE: Clear translucent crystals, white to grey, occasionally light brown matrix, hard, coarse crystalline

UPPER EVAPORITE MARKER
1955 m MD RKB / 1955 m TVD RKB
(-1933 m TVD MSL, 1.827 s)

CLAYSTONE: Light to medium dark grey, soft to firm, partly blocky, non calcareous, silty, sticky, partly mixed with salt

HALITE: Clear translucent crystals in white to grey, occasionally light brown, matrix, hard, coarse crystalline

ANHYDRITE: White, soft to firm, amorphous, blocky

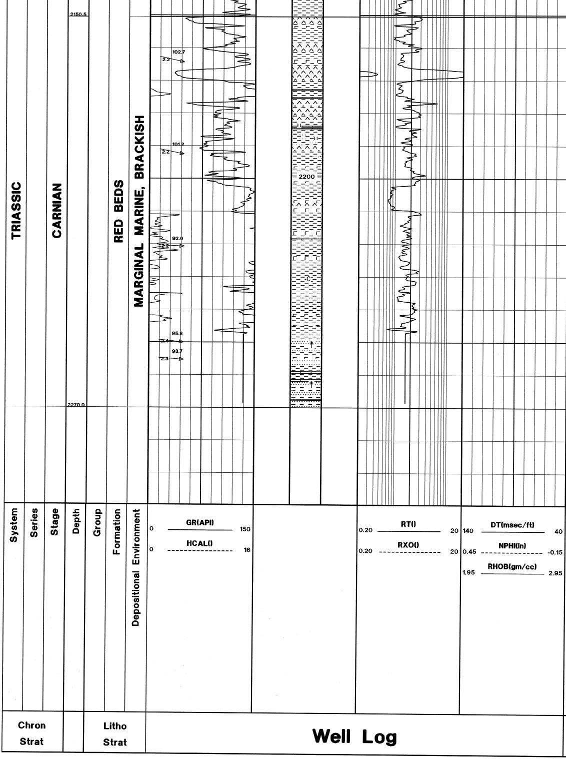
CLAYSTONE: Varicolored, firm to moderate hard, blocky, often splintery, moderate calcareous

ANHYDRITE: White, firm, amorphous, blocky

CLAYSTONE: Varicolored, firm to moderately hard, blocky to splintery, moderately calcareous

CLAYSTONE: Varicolored, soft to firm, subblocky to amorphous, rare slightly calcareous, very sticky, soluble, traces of glauconite

CLAYSTONE: Medium to dark grey, light brownish red, occasional greyish red, soft to firm, amorphous to sub blocky, partly slightly calcareous, soluble in parts



LOWER EVAPORITE MARKER
2151 m MD RKB / 2151 m TVD RKB
(-2129 m TVD MSL, TWT: 1.992 s)

ANHYDRITE: Predominantly white, firm, amorphous, rare very light brown, hard, microcrystalline

CLAYSTONE: Medium grey to dark grey, light brownish grey to greyish red, soft to firm, soluble in part, subblocky to amorphous, slightly calcareous in part

SANDSTONE (traces): Clear to milky white loose quartz grains, coarse to very coarse, rounded

CLAYSTONE: ;edium grey to medium dark grey, light brownish grey, greyish red in part, soft to firm, soluble in part, subblocky to amorphous, slightly calcareous in part

POLYHALITE: Clear translucent crystals in white to light grey matrix, hard, coarse crystalline, occasional as massive light orange amorphous aggregates, white to very light brown in part, moderate hard

CLAYSTONE: Red brown, soft, amorphous, non calcareous, slightly sticky

CLAYSTONE: Predominantly light jade green, occasional dark greyish green, firm, blocky to platy, fissile, non calcareous

SANDSTONE: Clear translucent to milky white loose quartz grains, very fine to medium, well rounded, rare subangular, moderate to well sorted, rare dark carbonaceous matrix material, traces of glauconite

SANDSTONE: Clear translucent to milky quartz, loose grains, very light brown, very fine to coarse, sub angular to sub rounded, poor to moderate sorted, slightly calcareous, rare carbonaceous matrix material

LIMESTONE: White, occasional beige, soft, amorphous, occasional micro- to fine crystalline

TD
2270 m MD RKB / 2270 m TVD RKB
(-2248 m TVD MSL)

Lithological Descriptions